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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,916	05/24/2001	John Rodriguez	LS/0026.00	5324

8791 7590 08/31/2006

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EXAMINER
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MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/865,916

Applicant(s)

RODRIGUEZ, JOHN

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 21, 2006 has been entered.

Claims 1 and 10 have been amended.

Claims 1-20 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1, 6, 7, 10, 15, 16, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al. (US 2001/0042023 A1).

Anderson discloses a method to be performed on a computing device for providing improved assignment of product orders to one or more of a plurality of fulfillers, the method comprising:

[Claim 1] receiving an order that requires fulfillment from one or more of the plurality of fulfillers, said order comprising individual order items (¶ 20 -- A buyer completes an order consisting of one or multiple items. Eligible suppliers are sorted, or ranked, based on distance from the buyer's shipping address on the basis of nearest to furthest);

ranking said plurality of fulfillers from most favorable to least favorable, based on specified criteria (¶ 20 -- Eligible suppliers are sorted, or ranked, based on distance from the buyer's shipping address on the basis of nearest to furthest. Also, the suppliers must be able to supply the ordered item(s));

when all order items of the order can be fulfilled by a single fulfiller, assigning fulfillment of the entire order to the most-favorable fulfiller that can fulfill all order items (¶¶ 20-22 -- The nearest eligible shipper who can fulfill an order for item(s) completely is selected);

otherwise splitting the order by assigning fulfillment of individual order items to the most-favorable fulfillers that collectively can fulfill all order items (¶¶ 20-22 -- The nearest eligible shipper who can fulfill an order for item(s) completely is selected. Otherwise, a minimum number of suppliers who can fulfill the order are selected);

[Claim 6] wherein the specified criteria include successively rotating the fulfillers in a round-robin manner to ensure fairness of selection of otherwise equally-qualified fulfillers (§ 20 -- Eligible suppliers are sorted, or ranked, based on distance from the buyer's shipping address on the basis of nearest to furthest. The tiebreaker for suppliers of the same distance is a round robin. Ensuring fairness of selection of otherwise equally-qualified fulfillers is the natural result of a round robin selection, such as the round robin selection used by Anderson);

[Claim 7] automatically generating a fulfillment request based on how fulfillment has been assigned (§§ 20-22, 37-38 -- The suppliers can accept order fulfillment requests and update the status of the order fulfillment process).

[Claims 10, 15, 16, 20] Claims 10, 15, 16, and 20 recite limitations already addressed by the rejection of claims 1, 6, and 7 above; therefore, the same rejection applies. It should be noted that the "desirable attributes" recited in claims 10, 15, and 16 correspond to the "specified criteria" recited in claims 1, 6, and 7 and are similarly addressed by Anderson.

Furthermore, regarding claim 20, Anderson discloses that each fulfiller is a selected one of a distributor, supplier, vendor, manufacturer, or service bureau (§§ 20-22 -- Orders are placed with suppliers).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 2001/0042023 A1), as applied to claims 1 and 10 above.

[Claim 2] Anderson does not expressly teach that said criteria include minimizing shipping costs for a customer that is to receive the order; however, Anderson does use the distance of the supplier from the buyer's shipping address (on the basis of nearest to furthest) to rank eligible suppliers (§ 20). Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention for a buyer to minimize shipping costs by selecting a supplier located closer to him/her. All other things being substantially equal, it is typically more economical to order items from a local supplier than from one located significantly farther away. Since Anderson gives preference to suppliers located closer to the buyer, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to manipulate Anderson's distance criteria to minimize shipping costs for a customer (buyer) that is to receive the order in order to provide customers (buyers) with the economic benefit typically reaped from receiving shipments from a local supplier as opposed to suppliers located more remotely (all other things being substantially equal).

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[Claim 3] Anderson does not expressly teach that said criteria include minimizing shipping costs for a middleman who received the order from a customer; however, Anderson does use the distance of the supplier from the buyer's shipping address (on the basis of nearest to furthest) to rank eligible suppliers (§ 20). Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention for a buyer to minimize shipping costs by selecting a supplier located closer to him/her. All other things being substantially equal, it is typically more economical to order items from a local supplier than from one located significantly farther away. Furthermore, Official Notice is taken that it was old and well-known in the art of ordering and shipment planning at the time of Applicant's invention for a customer/buyer to order items through a middleman. For example, middlemen (such as third party logistics providers) offer various ordering and shipment planning services for the convenience of their customers. Official Notice is also taken that it was old and well-known in the art of ordering and shipment planning services at the time of Applicant's invention for a middleman to pass on the costs associated with ordering and shipment planning to a respective customer. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Anderson to accommodate ordering from a buyer through a middleman in order to provide added convenience to buyers by relieving them of the normal duties associated with ordering and shipment planning. Additionally, since Anderson gives preference to suppliers located closer to the buyer, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to manipulate Anderson's distance criteria

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to minimize shipping costs for a customer (buyer) that is to receive the order in order to provide customers (buyers) with the economic benefit typically reaped from receiving shipments from a local supplier as opposed to suppliers located more remotely (all other things being substantially equal). By minimizing costs that are attributed to shipping an order to a buyer who utilizes a middleman, the shipping costs to the middleman are effectively minimized as well; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Anderson such that said criteria include minimizing shipping costs for a middleman who received the order from a customer (buyer), so that the benefits of lower shipping costs may be passed on to and reaped by the customer (buyer) as well.

[Claim 4] Anderson does not expressly teach that said criteria include minimizing shipping costs by minimizing the number of fulfillers used when splitting an order; however, Anderson does use the distance of the supplier from the buyer's shipping address (on the basis of nearest to furthest) to rank eligible suppliers (§ 20) and Anderson also preferably assigns orders for multiple products to a single supplier or a minimum number of suppliers (§ 22). Official Notice is taken that it was old and well-known in the art at the time of Applicant's invention for a buyer to minimize shipping costs by selecting a supplier located closer to him/her. All other things being substantially equal, it is typically more economical to order items from a local supplier than from one located significantly farther away. Since Anderson gives preference to suppliers located closer to the buyer, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to



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manipulate Anderson's distance criteria to minimize shipping costs for a customer (buyer) that is to receive the order in order to provide customers (buyers) with the economic benefit typically reaped from receiving shipments from a local supplier as opposed to suppliers located more remotely (all other things being substantially equal). Additionally, Official Notice is taken that it is old and well-known in the art of shipping that it is often more economical to ship items from less sources than from more sources (all else being equal). For example, the shipping fees charged for shipping three pieces of furniture from three separate suppliers will likely be greater than if all three pieces of furniture were shipped from only one or two of the aforementioned suppliers.

Furthermore, in Anderson's scenario where a minimum number of multiple suppliers are selected to fulfill an order, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Anderson wherein said criteria include minimizing shipping costs by minimizing the number of fulfillers used when splitting an order because minimizing the number of fulfillers used to fulfill an order often minimizes shipping costs, thereby providing Anderson's buyers with greater economic benefit when paying shipping costs.

[Claim 5] Anderson does not expressly teach that minimizing shipping costs comprises minimizing the cumulative shipping distances from said multiple fulfillers; however, Anderson does use the distance of the supplier from the buyer's shipping address (on the basis of nearest to furthest) to rank eligible suppliers (§ 20) and Anderson also preferably assigns orders for multiple products to a single supplier or a minimum number of suppliers (§ 22). Official Notice is taken that it was old and well-

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known in the art at the time of Applicant's invention for a buyer to minimize shipping costs by selecting a supplier located closer to him/her. All other things being substantially equal, it is typically more economical to order items from a local supplier than from one located significantly farther away. Since Anderson gives preference to suppliers located closer to the buyer, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to manipulate Anderson's distance criteria to minimize shipping costs for a customer that is to receive the order in order to provide customers (buyers) with the economic benefit typically reaped from receiving shipments from a local suppliers as opposed to suppliers located more remotely (all other things being substantially equal). Furthermore, in Anderson's scenario where a minimum number of multiple suppliers are selected to fulfill an order, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Anderson such that minimizing shipping costs comprises minimizing the cumulative shipping distances from said multiple fulfillers in order to cumulatively minimize shipping costs, thereby providing Anderson's customers (buyers) with greater economic benefit when paying shipping costs.

[Claims 11-14]      Claims 11-14 recite limitations already addressed by the rejection of claims 2-5 above; therefore, the same rejection applies. It should be noted that the "desirable attributes" recited in claims 10, 15, and 16 correspond to the "specified criteria" recited in claims 2-5 and are similarly addressed by Anderson.

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7. Claims 8, 9, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 2001/0042023 A1), as applied to claims 1 and 10 above, in view of Kamath et al. (US 2002/0026373 A1).

[Claims 8, 9] Anderson does not expressly disclose that a two-dimensional in-memory data structure comprising a hash table is employed to indicate which of said one or more fulfillers can fulfill which types of said individual order items that may be ordered. However, Kamath discloses an online ordering system that maps out items ordered by a customer into the corresponding item identifier utilized by the vendor determined to be capable of fulfilling an item order request in a hash table (§ 40). This procedure facilitates more express ordering by more quickly translating the customer identifier for an ordered item to the corresponding vendor item identifier (as implied in § 41 of Kamath). Since both Anderson and Kamath are directed toward improving an ordering process, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Anderson to incorporate a two-dimensional in-memory data structure comprising a hash table employed to indicate which of said one or more fulfillers can fulfill which types of said individual order items that may be ordered (as taught by Kamath, in which the mapped vendor is understood to be able to supply an item in question) in order to facilitate more express ordering by more quickly translating the customer identifier for an ordered item to the corresponding vendor item identifier (as implied in § 41 of Kamath).

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[Claims 17-19]        Claims 17-19 recite limitations already addressed by the rejection of claims 8 and 9 above; therefore, the same rejection applies.

Furthermore, regarding claim 19, while the Anderson-Kamath combination addresses the use of a hash table (as discussed above); neither Anderson nor Kamath expressly teaches that said two-dimensional data structure is extended into a three-dimensional data structure by having each entry of the hash table index, based on fulfiller/order item, into a bit vector indicating one or more order items for the order that may be fulfilled by that corresponding fulfiller shipping that corresponding order item. However, Official Notice is taken that it was old and well-known in the art of database management at the time of Applicant's invention to utilize a bit array (or bit vector) data structure. Such a data structure provides the benefit of more compact data storage. Since the Anderson-Kamath combination discloses use of a hash table for indicating one or more order items for the order that may be fulfilled by that corresponding fulfiller shipping that corresponding order item and the use of bit vectors is notoriously old and well-known in the art of database management, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Anderson-Kamath combination such that said two-dimensional data structure is extended into a three-dimensional data structure by having each entry of the hash table index, based on fulfiller/order item, into a bit vector indicating one or more order items for the order that may be fulfilled by that corresponding fulfiller shipping that corresponding order item in order to reduce the amount of storage space needed to

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store the order-related data in the Anderson-Kamath combination, thereby yielding more efficient and economical storage options.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3623

August 26, 2006